CLAIMS

1. A spin-detection magnetic memory arranged on a semiconductor junction 103 formed by two adjacent zones, the first and second zones 101 and 102 presenting conductivity respectively of a first type and of a second type, and comprising first and second connection cells 110 and 120 disposed on either side of said junction 103, each cell being provided with a magnetization module 111-112, 121-122, the memory being characterized in that at least one of the cells includes a bias electrode 113, 123 in addition to said magnetization module.

2. A memory according to claim 1, characterized in that one of said magnetization modules 111-112 is adjacent to said junction.

3. A memory according to claim 1 or claim 2, characterized in that at least one of said magnetization modules includes a buffer layer 111, in contact with said zone 101, a magnetic layer 102 being placed on said buffer layer.

4. A memory according to claim 3, characterized in that said buffer layer 111 is made of an insulating material.

5. A memory according to claim 4, characterized in that the thickness of said buffer layer 111 is such that it enables conduction to take place by the tunnel effect between said magnetization layer and said zone.

6. A memory according to any preceding claim, characterized in that the distance between the two magnetization modules 111-112, 121-122 is less than twice the spin-diffusion length.

7. A memory according to any preceding claim, characterized in that said first zone 101 presents conductivity of p-type.